

GILA RIVER BASIN

09498400 PINAL CREEK AT INSPIRATION DAM, NEAR GLOBE, AZ

LOCATION.--Lat 33° 34'23", long 110° 54'02", in NE1/4NW1/4SE1/4 sec. 26, T.3 N., R.14 E., Gila County, Hydrologic Unit 15060103, in Tonto National Forest, on right bank 7 ft upstream from Inspiration Dam, 3.8 mi upstream from mouth, and 14 mi northwest of Globe.

DRAINAGE AREA.--195 mi², of which about 33 mi² is partly or entirely noncontributing due to mining operations (1988).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,740 ft above sea level, from topographic map. Prior to Feb. 12, 1991, at datum 1.0 ft higher.

REMARKS.--No estimated daily discharge. Records fair. Since Nov. 20, 1999, base flows may be affected by discharges from a ground-water treatment plant, located about 5 mi upstream from the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,700 ft³/s Jan. 11, 1993, gage height, 8.50 ft, on basis of slope-area measurement of peak flow; minimum daily, 0.64 ft³/s July 1, 1999.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 6.....	2125	849	3.38
Sept. 10.....	1500	*2,520	*5.12

Minimum daily discharge, 1.4 ft³/s Aug. 15, Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	7.4	6.9	6.7	6.2	5.5	4.9	4.0	2.8	1.7	1.7	1.5
2	5.1	7.1	6.7	6.7	6.1	5.5	4.9	4.1	2.7	1.7	1.7	1.4
3	5.0	7.3	6.7	6.6	6.2	5.6	4.8	4.1	2.7	1.7	2.1	1.5
4	4.9	7.4	7.2	6.6	6.1	5.6	4.9	4.0	2.5	1.9	2.2	1.7
5	4.9	7.5	6.6	6.5	6.0	5.6	4.9	4.0	2.3	1.6	2.0	1.8
6	66	7.5	6.6	6.5	5.9	5.6	4.9	3.9	2.3	1.8	2.0	1.8
7	16	7.7	6.8	6.3	6.0	5.6	5.0	3.9	2.5	1.9	2.0	2.0
8	6.8	7.6	6.9	6.0	6.5	5.8	4.9	3.5	2.5	1.8	1.9	2.3
9	6.6	7.2	6.8	6.4	6.0	5.5	5.0	4.0	2.4	1.9	1.8	2.3
10	6.7	6.5	6.7	6.6	5.6	5.4	4.8	3.7	2.3	2.1	1.7	202
11	6.2	6.3	6.8	6.9	5.6	5.4	4.7	4.1	2.3	2.3	1.6	7.8
12	6.3	6.3	6.7	6.8	5.6	5.6	4.5	3.8	2.3	1.8	1.7	4.6
13	6.3	6.7	6.9	6.8	5.3	5.2	4.5	4.0	2.5	1.7	1.9	4.3
14	6.5	6.6	6.9	6.7	5.7	5.4	4.6	4.0	2.3	1.6	1.7	3.9
15	6.4	6.4	7.2	6.7	6.0	5.4	4.7	4.0	2.3	1.9	1.4	3.6
16	6.3	6.2	7.2	6.8	6.0	5.4	4.9	3.7	2.0	1.9	1.8	3.5
17	6.9	6.3	7.0	6.9	5.6	5.4	4.5	3.7	1.8	2.0	1.9	4.0
18	6.9	6.4	7.1	7.1	5.6	5.4	4.6	3.9	1.9	1.9	1.8	3.8
19	6.9	6.6	6.8	6.8	5.5	5.3	4.3	3.7	2.1	1.7	1.7	3.8
20	6.8	6.9	6.8	6.5	5.5	5.3	4.6	3.6	2.2	1.8	1.7	3.5
21	6.9	6.8	6.7	6.5	5.5	5.3	4.8	3.5	1.9	1.7	1.8	3.0
22	7.0	6.5	6.8	6.5	5.5	5.3	4.6	3.5	2.8	1.7	1.7	3.1
23	7.1	6.4	6.5	6.4	5.7	5.3	4.9	3.6	2.0	1.7	1.7	3.0
24	7.1	6.2	7.1	5.9	5.8	5.4	4.5	3.3	1.8	1.7	1.7	3.2
25	7.0	6.6	7.2	6.3	5.5	5.2	4.4	3.2	1.8	1.8	1.7	3.1
26	7.3	6.5	7.1	6.5	5.3	5.3	4.2	3.7	1.8	1.9	2.4	2.7
27	7.2	6.5	6.9	6.5	5.2	5.0	4.2	3.8	1.7	1.8	1.5	3.1
28	6.6	6.5	7.1	6.5	5.5	4.9	4.3	3.0	1.6	1.8	1.8	3.1
29	7.1	6.6	7.3	6.4	---	5.0	4.2	3.2	1.8	1.7	2.2	3.0
30	6.4	6.7	7.3	6.6	---	5.0	4.1	3.0	1.8	1.8	1.7	3.2
31	6.3	---	7.3	6.4	---	5.0	---	3.1	---	1.7	1.6	---
TOTAL	268.5	203.2	214.6	203.4	161.0	166.2	139.1	114.6	65.7	56.0	56.1	291.6
MEAN	8.661	6.773	6.923	6.561	5.750	5.361	4.637	3.697	2.190	1.806	1.810	9.720
MAX	66	7.7	7.3	7.1	6.5	5.8	5.0	4.1	2.8	2.3	2.4	202
MIN	4.9	6.2	6.5	5.9	5.2	4.9	4.1	3.0	1.6	1.6	1.4	1.4
AC-FT	533	403	426	403	319	330	276	227	130	111	111	578
CFSM	0.04	0.03	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.05
IN.	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2002, BY WATER YEAR (WY)

MEAN	9.636	7.807	10.87	30.44	28.58	15.68	9.787	8.036	6.306	7.769	8.546	7.484
MAX	38.8	13.0	58.4	440	406	67.3	30.1	19.6	16.2	17.1	28.4	16.4
(WY)	1984	2001	1985	1993	1993	1993	1993	1993	1993	1981	1990	1983
MIN	2.56	3.72	3.37	3.20	3.44	3.55	3.46	2.38	1.07	1.81	1.81	2.81
(WY)	2000	1999	1999	1999	1999	1999	1999	1999	1999	2002	2002	1989

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1980 - 2002

ANNUAL TOTAL	2188.7	1940.0	12.47
ANNUAL MEAN	5.996	5.315	84.2
HIGHEST ANNUAL MEAN			3.76
LOWEST ANNUAL MEAN			1993
HIGHEST DAILY MEAN	66	202	3300
LOWEST DAILY MEAN	2.6	1.4	0.64
ANNUAL SEVEN-DAY MINIMUM	3.2	1.6	0.72
ANNUAL RUNOFF (AC-FT)	4340	3850	9030
ANNUAL RUNOFF (CFSM)	0.031	0.027	0.064
ANNUAL RUNOFF (INCHES)	0.42	0.37	0.87
10 PERCENT EXCEEDS	7.7	6.9	12
50 PERCENT EXCEEDS	6.3	5.0	7.2
90 PERCENT EXCEEDS	3.9	1.8	3.9

GILA RIVER BASIN
09498400 PINAL CREEK AT INSPIRATION DAM, NEAR GLOBE, AZ—CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Nov. 1979 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
DEC 20...	1035	6.9	.78	691	10.4	99	7.7	2060	12.0	8.4	1100	1200	363	
MAR 29...	1130	4.9	.51	686	8.5	100	7.6	2140	19.5	17.7	1100	1200	371	
JUN 11...	1250	2.4	.57	686	7.1	97	7.6	2190	33.0	25.4	1200	1200	377	
SEP 06...	1210	2.0	.97	687	7.3	101	7.0	2250	30.5	25.8	1200	1200	389	
		CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDEd (MG/L) (00530)
DEC 20...	368	64.0	64.0	4.50	.7	56.0	48	58	<1	56.0	1.1	1210	<1c1	
MAR 29...	370	60.0	59.0	4.40	.8	61.0	46	56	<1	54.0	1.0	1200	3	
JUN 11...	401	63.0	66.0	4.20	.9	69.0	45	55	<1	55.0	1.0	1250	<1	
SEP 06...	387	63.0	64.0	5.30	.8	65.0	45	55	<1	59.0	1.0	1250	<1	
		SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)
DEC 20...	2.43	E1960c1	1780	1.1	.02	.03	<.020	1.1	<.02	8	E7k	E2k	<1	
MAR 29...	2.65	1950	1780	<.20	.01	.01	<.020	--	<.02	<5	E4k	E6k	<1	
JUN 11...	2.38	1750	1850	<.20	.02	.03	<.020	--	<.02	<5	E8k	35	<1	
SEP 06...	2.82	2070	1860	<.20	.01	.01	<.020	--	<.02	<5	100	--	<1	
		ANTI-MONY, TOTAL (UG/L AS SB) (01097)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
DEC 20...	<1	<2	<2	9.4	9.7	<1	<1	53	49	<.5	<.5	<1	<1	
MAR 29...	<1	<1	<1	8.7	9.0	<1	<1	48	50	<.5	<.5	<1	<1	
JUN 11...	<1	<1	<1	11.0	11.0	<1	<1	53	52	<.5	<.5	<1	<1	
SEP 06...	<1	2	2	12.0	13.0	<1	<1	55	60	<.5	<.5	<1	<1	

09498400 PINAL CREEK AT INSPIRATION DAM, NEAR GLOBE, AZ—CONTINUED

Date	COPPER, DIS- SOLVED	COPPER, TOTAL RECOV- ERABLE	IRON, DIS- SOLVED	IRON, TOTAL RECOV- ERABLE	LEAD, DIS- SOLVED	LEAD, TOTAL RECOV- ERABLE	MANGA- NESE, DIS- SOLVED	MANGA- NESE, TOTAL RECOV- ERABLE	MERCURY DIS- SOLVED	MERCURY TOTAL RECOV- ERABLE	NICKEL, DIS- SOLVED	NICKEL, TOTAL RECOV- ERABLE	SELE- NIUM, DIS- SOLVED
	(UG/L AS CU (01040)	(UG/L AS CU (01042)	(UG/L AS FE (01046)	(UG/L AS FE (01045)	(UG/L AS PB (01049)	(UG/L AS PB (01051)	(UG/L AS MN (01056)	(UG/L AS MN (01055)	(UG/L AS HG (71890)	(UG/L AS HG (71900)	(UG/L AS NI (01065)	(UG/L AS NI (01067)	(UG/L AS SE (01145)
DEC 20...	<2	<2	<2	100	<2	<2	240	314	<.10	<.1	5	4	<2
MAR 29...	<2	2	2	48	<2	<2	196	243	<.10	<.1	3	4	<1
JUN 11...	<2	2	<2	25	<2	<2	225	236	<.10	<.1	4	4	<1
SEP 06...	2	<2	2	15	<2	<2	175	186	<.10	<.1	3	4	<1
Date	SELE- NIUM, TOTAL	SILVER, DIS- SOLVED	SILVER, TOTAL RECOV- ERABLE	STRON- TIUM, TOTAL RECOV- ERABLE	THAL- LIUM, DIS- SOLVED	THAL- LIUM, TOTAL	ZINC, DIS- SOLVED	ZINC, TOTAL RECOV- ERABLE	SEDI- MENT, SUS- PENDED	SEDI- MENT, DIS- CHARGE, SUS- PENDED			
	(UG/L AS SE (01147)	(UG/L AS AG (01075)	(UG/L AS AG (01077)	(UG/L AS SR (01082)	(UG/L AS TL (01057)	(UG/L AS TL (01059)	(UG/L AS ZN (01090)	(UG/L AS ZN (01092)	(MG/L (80154)	(MG/L (80155)			
DEC 20...	<4	<1	<1	1180	<2	<2	23	10	1.0	.02			
MAR 29...	<1	<1	<1	1130	<2	<2	7	4	1.0	.01			
JUN 11...	<1	<1	<1	1170	<2	<2	7	5	4.0	.03			
SEP 06...	1	<1	<1	1200	<2	<2	17	2	2.0	.01			

```
< -- Less than
E -- Estimated value
```

```
c -- See laboratory comment
k -- Counts outside acceptable range
l -- Sample lab preparation problem
```

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Sample type	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)
JUN 11...	1255	2	5.8	1	30.0	.04	<.03	<.1	.20	.02	<.020	<.02	<3
Date	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)			
JUN 11...	<.5	<1	<.5	<1	<2	<2	<2	<1	<1	<2			
Remark codes used in this report: < -- Less than													